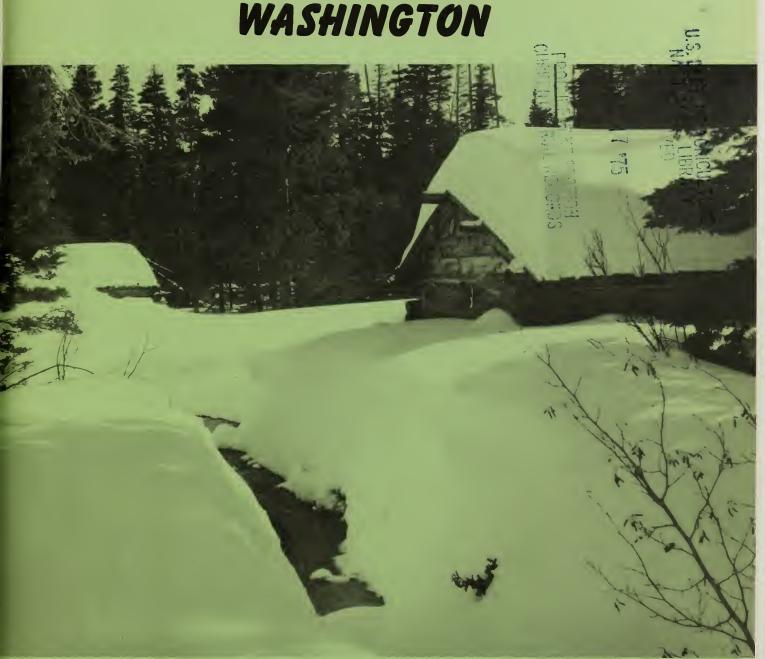
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



1292.9 So 3Fe

WATER SUPPLY OUTLOOK FOR



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.



TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Proadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 841 38
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

ENT of

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

WATER SUPPLY OUTLOOK FOR WASHINGTON

and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

GALEN S. BRIDGE

STATE CONSERVATIONIST SOIL CONSERVATION SERVICE SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

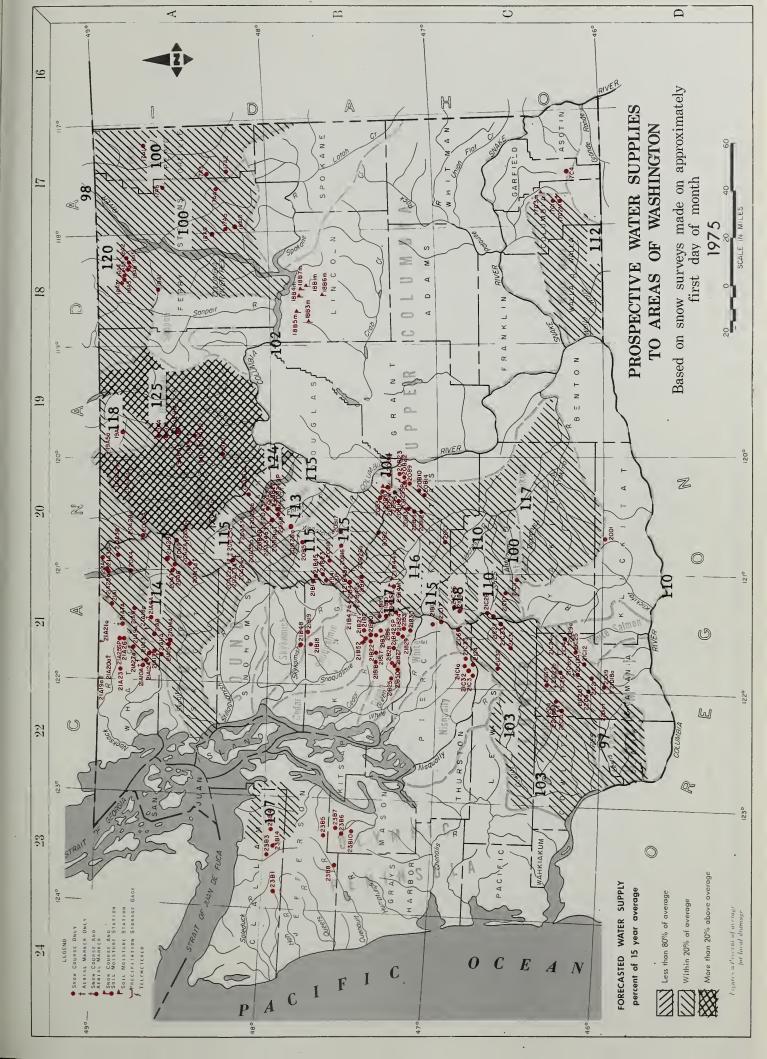
DIRECTOR
DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

ROBERT T. DAVIS, Snow Survey Supervisor

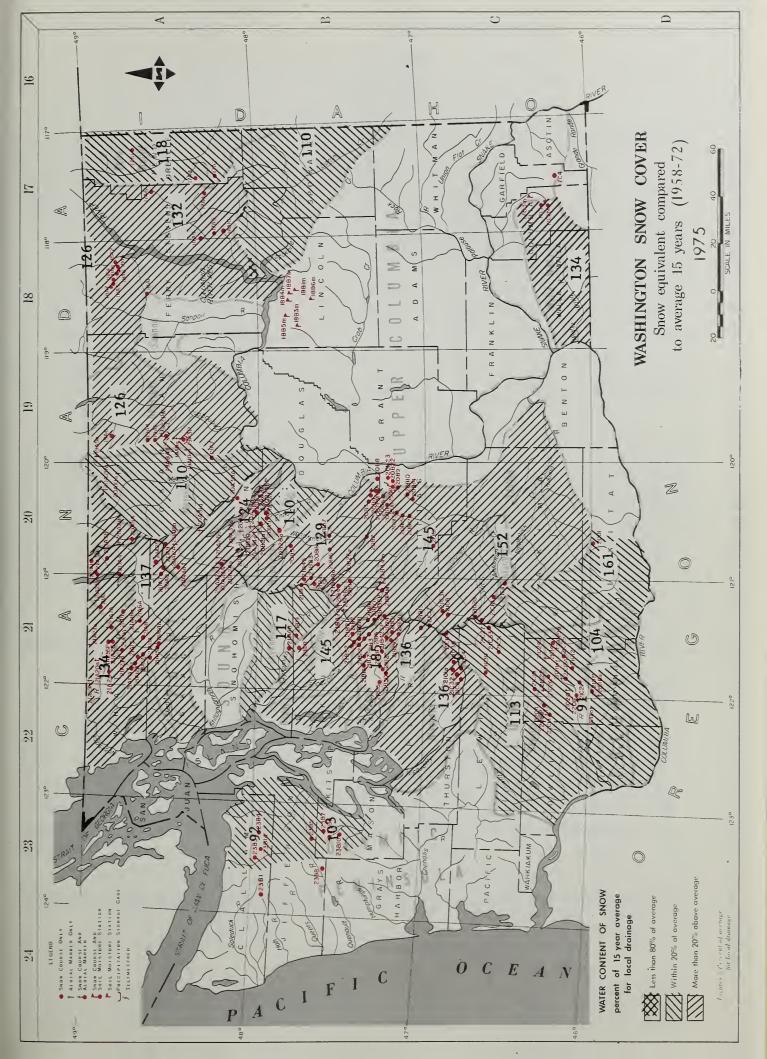
SOIL CONSERVATION SERVICE 360 U.S. COURTHOUSE SPOKANE, WASHINGTON 99201





INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

Skogit River Skog	Baker Pass Baker River 21A27a 1 37N 71.	OLYMPIC PENINSULA Dungeness River 2384 1 28N 5W Morse Creek Cox Valley Elwho River 23814 31 29N 6W Elwho River 2383 36 29N 7W Skokomish River 8 Skokomish River 8 Skokomish River 2385 17 24N 5W Four Stream 2386 16 24N 5W Home Sweet Home 2388 25 24N 7W Sundown Pass Soleduck River Deer Lake 2381 14 28N 9W	LEGEND 21A7 SNOR COURSE ONLY 21A7A SNOR COURSE ONLY 21A7A SNOR COURSE ONLY 21A7A SNOR COURSE AND SITUATION STORGE STATION 21A7A SNOR COURSE AND SITUATION STORGE STATION 21A7A SOR COURSE AND SITUATION STORGE STATION 21A7A SOR COURSE AND PRECIPITATION STORGE STATION 21A7A SNOR PILLOR
Lewis River (continued) Divide Meadow Continued) Divide Meadow Corad Sonith Creek Road Corad	Cayuse Pass Cowlitz River 2106 15 16N 10E 5300 Mosquito Meadows 2103 35 10N 76 4100 Planapaecosh 2103 21 28 15N 10E 2200 Pigrail Peak 2103 21 13N 10E 2870 Potato Hill 2103 11 13N 11E 5900 Potato Hill 2103 11 13N 11E 5900 Willame Creek 2103 13N 8E 5250 Willame Creek 2103 2104 35 13N 8E 5250 Longmite Puck (New) 2103 29 15N 8E 2760 Paradise Park (New) 2103 29 15N 8E 2760 Paradise Park (New) 2103 29 15N 8E 2760 Paradise Park (New) 2103 213 15N 8E 5500 Paradise Park (New) 2103 15 N 8E 5500 Paradise Parad	Green River Green River 11813 30 1BN 11E 21813 10 1BN 11E 21824 18 20N 11E 21825 21 21N 9E No. 3 21827 14 20N 8E 21828 12 20N 8E 21828 12 20N 8E 21829 14 20N 1E 21850 21 20N 8E 21810 25 19N 11E 21843SP 14 20N 11E 21843 10 21N 10E 21851 30 22N 10E 21813 31 22N 9E New 21852 8 22N 9E 21816 31 22N 9E 21817 11 21N 9E 21850 1 21N 10E 21851 31 22N 9E 21852 31 22N 9E	Snoqualmie River Alpine Meadow 2184B 31 27N 9E 3500 2181B 26 26N 9E 1900 Skykomish River Lake Elizabeth 21819 33 26N 10E 2900
Nematical Sections Name Number Section Number Sections N	Crab Creek 1881m	OWER COLUMBIA DRAINAGE Asstrict Cach Lake) OWER COLUMBIA DRAINAGE Asotin Greek Mill Gr	White Solmon River Cultus Creek 21C12 35 7N BE 4000 Lewis River 21C22a 19 9N BE 4B00 Bob's Trail 21C22a 19 9N BE 4B00 Bob's Trail 21C21 5 BN 7E 2200 Calamity Ridge 22D1a B N 7E 2500 Council Pass 21C1Ba 24 9N 9E 4200
NUMBER SEC. TWP. RANGE ELEN	Colville River 174 11 35N 41E 1850 34 52N 38E 1874 11 35N 41E 1774 11 35N 41E 1774 11 35N 41E 1775 26 31N 38E Sanpoil River 185	Dolling Match 20A29a 8 39N 20L 7000 Iloreshoe Basin 19A5 7 57N 18L 6500 Iloup Loup Chelon Loke Bosin 19A7 36 34N 25E 4650 Loup Loup Chelon Loke Bosin 19A7 36 34N 25E 4650 Little Meadows 20A22a 12 31N 16E 5510 Little Meadows 20A23a 31N 16E 5275 Lyman Lake 20A13a 19 34N 16E 5275 Park Creek Flat 20A13a 19 34N 16E 5270 Park Creek Flat 20A13a 19 34N 16E 5270 Park Creek Rudge 20A13a 19 34N 16E 6500 Park Creek Rudge 20A13a 19 34N 16E 6500 Park Creek Plat 20A13a 25N 17E 3150 Entiat Pass 20A50A 22 3N 18E 6500 Entiat Macows 20A33a 28N 18E 6510 Pope Rudge 20B20B 20A33a 25N 18E 6510 Pope Rudge 20B20B 20A35a 25N 18E 6400 Shady Pass 20A37a 25N 18E 6400 Shady Pass 20A37a 20 29N 18E 5300 Formay Creek 20A35a 21 30N 17E 3850 Tommy Creek 20A35a 21 30N 17E 3850 Tommy Creek 20A35a 21 30N 17E 3850 Tommy Creek 20A35a 21 30N 18E 5300 Tommy Creek 20A37a 20 28N 18E 5300 Tommy Creek 20A35a 21 30N 18E 3300 Tommy Creek 20A35a 21 30N 18E	Wenotchee River Berne-Mill Creek (New) 21833 7 26N 15E 3170 Berne-Mill Creek (New) 21841Sp 13 26N 14E 3240 Bewett Pass No. 2 2082 35 22N 17E 4270 Chiwaukum G. S. 2082 33 27N 17E 1970 Lake Wenatchee 2085 33 27N 17E 1970 Lawenworth R. S. 20817 1 24N 17E 1127 Marritt 20818 4 26N 16E 2140 Stevens Pass Sand Shed 21845 12 26N 19E 3700

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

Skagit River Skagit River Skagit River Skagit River Skagit River Skagit River Standard River	8 d ker River 21A.27a 1 37N 7L 21A.77 1 9 36N 8E 21A.7A 19 39N 11E 21A.6A 17 38N 11E 21A.6A 17 38N 11E 21A.6A 23 38N 8E 21A.8A 27 38N 10E 21A.8A 27 38N 10E 21A.18A 27 37N 9E 21A.18 25 37N 9E 21A.18 25 37N 9E	Bald Mountain 21A19a 7 400 7E 4400 (Canyon Glacier Creek 21A20A 20 400 8E 5100 (Glacier Creek 21A2A 20 400 8E 5100 Panorama New 21A2A 910 38N 7E 3700 Panorama Snow Pillow 21A2SP 17 39N 9E 4300 Twin Lakes 21A21a 16 40N 9E 5200 Twin Lakes 21A21a 16 40N 9E 5200 Panorama Snow Pillow Pillow Snow Pillow Pillow Pillow Pillow	Dungeness River Dungeness River 2884 1 28N 580	LEGEND 21A7 SNOW COUSE OILY 21A7A STAIL MARKE BOLY 21A7A STOW COUSE OILY 21A7A STOW COUSE AND SULF MARKES 21A7M SON COUSES AND SULF MASTER STATION 21A7M SON COUSES AND SULF MASTER STATION 21A7M SON COUSES AND SULF STATION 21A7M SON COUSES AND PRECIPITATION STORAGE GAGE 21A7S SNOW FILLDON STORAGE GAGE
Lewis River (continued) Divide Meadow 21029a 21 9N 10E 560C Grand Meadow 21029a 21 9N 7E 580C Lone Pine Shelter 21029a 21 9N 7E 580C Marble Mountain 2205a 24 8N 5E 5200 Oldman Pass 205 A 8N 6E 200C Oldman Pass 205 A 8N 6E 200C Plains of Abraham 22019 22 6N 7E 3100 Spains of Abraham 2201a 35 9N 6E 2100 Spencer Meadow 21020a 16 8N 7E 3400 Spencer Meadow 21020a 16 8N 7E 3400 Surprise Lakes 21013A 14 7N 8E 4250 Timbered Peak 21018a 36 6N 6E 3000 Timbered Peak 21018a 36 6N 6E 3000	Cayuse Pass 2106 15 16N 10E 5300 Nosquito Meadows 21CD 25 18 16N 10E 5300 Ohamapecosh 21C32 28 15N 10E 2200 Pagkwood Lake 21C31 21 13N 10E 2870 Pagtail Peak 21C33 11 13N 10E 5900 Millame Creek 21C30 3 13N 8E 3250	PUGET SOUND DRAINAGE Nisqually River Chost Forest 21C4 23 15N 8E 4550 21C3 29 15N 8E 2760 21C3 29 15N 8E 2760 21C3 29 15N 8E 2760 21C3 21C1 13 15N 8E 5500 21C1 13 15N 8E 5050 21C1 20 15N 8E 2000 21C1 20 15N 8E 20 15N 8	Charley Creek 21825 27 21N 8E 1800 Charley Creek 21825 27 21N 8E 1200 Cougar Mountain 218428 21 21N 8E 2900 Grass Mountain No. 2 1827 14 20N 8E 2900 Crass Mountain No. 3 21828 12 20N 8E 2900 Lessar Mountain No. 3 21828 12 20N 8E 2900 Lessar Mountain No. 3 21829 36 20N 10E 3100 Lynn Lake 21829 36 20N 10E 3100 Snawhil Ridge 21831 5 19N 11E 4700 Stampede Pass 21830 25 21N 11E 3860 Twin Camp 21830 18 19N 11E 4100 Mt. Gardner Aux. 21832 31 22N 10E 2500 Mt. Lindsay 21820 31 22N 10E 2500 Mt. Mashington New 21821 31 22N 19E 2500 Mt. Mashington New 21821 31 22N 19E 3000 Sex Rex Rex Rex Rex Rex Rex Rex Rex Rex R	Alpine Meadow 21848 31 27N 9E 3500 01allie Meadow 21848 31 27N 9E 3500 01allie Meadows 21818 26 26N 9E 1900 Skykomish River 21819 33 26N 10E 2900
Wength #2 Wengthe Sic. TWP. RANGE ELEV	Crab Creek 1881m	ne nu	NST Side) 20815a 16 218 15 18 18 18 18 18 18 18 18 18 18 18 18 18	Cultus Creek 21C12 35 7N 8E 4000 Lewis River 21C22 19 9N 8E 4800 Bab's Trail 21C22 19 9N 8E 4800 Bab's Trail 21C21 25 8N 7E 2200 Calamity Ridge 22D1a 8 8N 8E 5500 Council Pass 21C18a 24 9N 9E 4200
UPPER COLUMBIA DRAINAGE Pend Oreille River	Colville River 170 19 36N 42E 180 34 32N 38E 180 1704 11 32N 41E 1704 11 32N 41E 1704 11 32N 41E 1704 11 32N 38E Sanpoil River Ss 1801 19 36N 35E Okanogan River 1908 2 56N 23E 1909 2 50N 24E 2 1001 30N 24E 2 2 50N 24E 2 2	20A28a 19A3P 19A2PN 19A2PN 19A2PN 19A0 19A0 19A0 19A3 19A3 19A3 19A3 19A3	Chelan Lake Basın Chelan Lake Basın Greenwood Flat Little Meadows Lohasa Rain 166 Rain 186 Rain 186	Wenatchee River Berne-Mill Creek 21823 7 26N 15E 3170 Berne-Mill Creek 21843 7 26N 15E 3170 Bewett Pass No. 2 2081 35 22N 17E 4270 Chiwaukum G. S. 2081 4 25N 17E 1810 Lake Waratchee 2085 32 27N 17E 1870 Leavenworth R. S. 2081 4 25N 17E 1870 Merritt 2081 1 24N 17E 1127 Stevens Pass 2081 4 26N 16E 2140 Stevens Pass Sand Shed 21845 12 26N 19E 3700

WATER SUPPLY OUTLOOK

State of Washington March 1, 1975

* There appears to have been a general improvement in the water supply fore- * * casts for the State of Washington from that which was reported last month. * * Most forecast points are now expected to flow about 5 percent greater than * * that which was forecasted on February 1. As usual, there are some minor * * exceptions, but these are on the smaller tributaries. All forecasts are for * * normal or above water supplies during the up coming snow melt season. The * * Columbia at Birchbank and the Lewis at Ariel are the only ones forecasted * * less than normal and these are | only 2 percent and 3 percent below, respec- * * tively. The high flows are forecasted to occur from the Okanogan and Methow * * River systems. The Okanogan at Tonasket is forecast to flow 25 percent * \star above normal and the Methow 24 percent above. The Water Resources Service \star * of British Columbia is forecasting the inflow to Okanogan Lake only * * slightly below the near record high flows of last year. Since the Okanogan * * above the Similkameen is only about 20 percent of the total flow of the * * Okanogan at Tonasket, this well above normal inflow will be absorbed by the * * lower flows expected from the Similkameen. During the month of February, * * rainfall was all well above normal, resulting in an accumulation of precip- * * itation for the winter months on the plus side. River flows during the past * * month were generally below normal, the result of below normal temperatures * * during February. Flows ranged from 60 percent below normal on the Spokane * * River at Post Falls to a high of 5 percent above normal for the Klickitat * * River as measured near Pitt. Reservoirs vary from above to below normal, * * but this is a result of need for irrigation water and/or power supplies. * * Adequate flows are expected to fill all reservoirs with the spring runoff * st and several of the irrigation reservoirs are presently being lowered to st* handle the above normal inflows expected. ҂

SNOW COVER

Snow surveys made near the first of March indicate the snow pack to range from a low of 9 percent below normal for the Lewis River Basin to a high of 85 percent above normal for the Green River Basin. This large range of snow cover, percentagewise, is the result of variable snow pack, elevationwise. In the Lewis River, some of the low elevation snow courses are reported to have well above normal snow packs. The higher elevation snow courses have lesser amounts but in this basin there are more high elevation snow courses than lower elevation snow courses. In the Green River Basin, it is just the opposite with the majority of snow courses at the lower elevations. In this case there is a greater influence in these figures by the lower elevation snow courses.

In the Upper Columbia Basin the snow cover, as compared to last year, ranges from 30 percent below normal to 28 percent above. Comparing this years snow cover to that which occurred in 1973 at this time, this range is from a low of 51 percent above to 184 percent above and when compared to normal, the range is from 10 percent above to 52 percent above. In the

Lower Columbia area, comparing the snow cover to last year, the range is from 37 percent below to 2 percent above and when comparing to 1973, the range is from 129 percent above to a high of 213 percent above. When comparing this area to normal the range is from the previously reported 9 percent below normal to the high of 61 percent above. The Puget Sound Drainage snow courses, when compared to last year, range from 36 percent below to 12 percent below. Comparing the same courses to 1973, the range is from 77 percent above to 222 percent above and comparing to normal, 17 percent above to the previously mentioned 85 percent above.

RESERVOIRS

The three major power reservoirs have water in storage that varies from 34 percent below normal for the Chelan Lake to 51 percent above for Lake Roosevelt. The irrigation reservoirs in the state have water in storage only 7 percent below normal and range from 73 percent below normal for Bumping Lake to 24 percent above for Salmon Lake near Okanogan. As previously reported, all reservoirs will fill with the spring runoff but uncontrolled spillage should be minimal through advanced management practices.

PRECIPITATION

During February, rainfall, as measured by the National Weather Service, at the lower valley stations was all well above normal. The wet spot was northeastern Washington, which had rainfall that was 144 percent greater than average. The southwestern slopes of the Cascades were reported to have only 7 percent above normal and the northwestern slopes, 9 percent. The Columbia River in Canada had precipitation 28 percent above normal and the head waters of the Pend Oreille and Spokane Rivers, 33 percent above. Central Washington was reported to have rainfall that was 26 percent above normal. This above normal precipitation should generally offset the well below normal precipitation that we had up through November of 1974.

SOIL MOISTURE

From the scattered reports of soil moisture at the higher elevations, the soils are still quite dry but with the above normal snow packs, this dryness will have little effect on the outcome of spring runoff.

STREAMFLOW

The cold weather of February generally kept all streams running well below normal. As reported before, the Spokane River inflow to Coeur d'Alene Lake was 60 percent below normal. The main stem of the Columbia River had a flow that ranged from 37 percent below normal at Grand Coulee to 16 percent below at Birchbank. The resultant of all streams is measured at The Dalles and flow there was 12 percent below normal. Forecasts of streamflow range from a high of 25 percent above normal to a low of 3 percent below so adequate flows can be expected during the forth coming runoff season. Numerical forecasts can be found following this narrative statement.

STREAMFLOW FORECASTS - MARCH 1975

The following summarized runoff forecasts are based principally on mountain snow-cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. Streamflow figures for 1974 are preliminary and subject to revision.

Basin, Stream	Forecast		al Stream	flow in T	housands	of Acr	
and	Runoff	%	Fore-				15 - Yr
Station	1975	15-Yr.	cast				Average
		Avg.	period	1974	1973	1972	58-72
	COLI	MDTA DAC	TN				
Columbia River System	COLU	MBIA BAS	IN				
Columbia River	45700	98	Apr-Sep	54227	34796	56680	46430
at Birchbank 1/	37100	99	Apr-Jul	44492	27876	46587	37548
at Birchbank 17	25900	94	Apr-Jun	31893	20203	34333	27549
				020,0			
Columbia River	70500	102	Apr-Sep	85139	45849	85860	68868
at Grand Coulee 1/	60000	103	Apr-Jul	73671	38193	73431	58379
_	46400	100	Apr-Jun	57033	29886	57727	46060
Columbia River	78000	104	Apr-Sep	96939	49117	97430	75337
bl Rock Island Dam 1/	65200	102	Apr-Jul	84480	41200	84085	64192
_	51400	102	Apr-Jun	65246	32032	66051	50604
Columbia River	110000	105	Apr-Sep	139724	65162	135452	104670
at The Dalles, Or 1/	94000	105	Apr-Jul	123569	54260	118552	89893
, -	76500	105	Apr-Jun	99282	43395	96933	73158
PEND OREILLE RIVER SYSTEM							
Pend Oreille River							
bl. Box Canyon	16000	100	Apr-Sep		8311	20294	15953
· ·	14600	99	Apr-Jul		7614	18724	14688
	12400	97	Apr-Jun		6756	16109	12777
KETTLE RIVER SYSTEM							
Kettle River	2250	120	Apr-Sep	2854	1121	2289	1873
nr. Laurier	2150	120	Apr-Jul	2780	1093	2205	1793
	1975	120	Apr-Jun	2514	1020	1965	1640

Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

		Season	al Streamf	flow in Th	nousands	of Acr	e-Feet
Basin, Stream	Forecast	%	Fore-				15-Yr
and	Runoff	15-Yr.	cast				Averag
Station	1975	Avg.	period	1974	1973	1972	58-72
Waterland Control (Control							
Kettle River System (Cont.) Colville River	148	100	A Co		E /.	11/	1/0
at Kettle Falls	137	100	Apr-Sep Apr-Jul		54 50	114 103	148
at Rettle ralls	125	98	Apr-Jun		48	94	137 128
	123	70	Apr-Jun		40	74	120
Spokane River System *							
Spokane River	3250	109	Apr-Sep		1140	4002	2983
at Post Falls, ID $\frac{2}{}$	3150	109	Apr-Jul		1082	387	2899
	3010	109	Apr-Jun		1022	`3644	2773
Okanogan River System	1700	110	۸	2276	726	2250	1517
Similkameen River	1790 1670	118 117	Apr-Sep	2276	736 697	3259	1517
nr. Nighthawk	1470	120	Apr-Jul Apr-Jun	2151 1729	621	3090 2568	1424 1222
	1470	120	Apr-Juli	1/49	021	4300	1222
Okanogan River	2150	125	Apr-Sep	2718	765	3852	1723
nr. Tonasket	1950	123	Apr-Jul	2491	707	3523	1582
	1670	124	Apr-Jun	1985	622	2895	1349
Methow River System	1200	10/	A C .		r10	1050	1.001
Methow River	1280 1200	124	Apr-Sep		512	1959	1031
nr. Pateros	1030	125 124	Apr-Jul Apr-Jun		476 417	1819 1524	963 832
	1030	124	Apr -Jun		41/	1324	032
Chelan River System							
Chelan River	1440	115	Apr-Sep	1343	777	1866	1253
at Chelan 3/	1300	117	Apr-Jul	1054	680	1619	1112
	1040	118	Apr-Jun	658	544	1250	881
Stehekin River	1040	115	Apr-Sep		541	1235	904
at Stehekin	900	116	Apr-Jul		447	1044	776
	710	118	Apr-Jun		352	772	600
Entiat	270	113	Apr-Sep		145	398	239
nr. Ardenvoir	245	112	Apr-Jul		131	361	220
	204	113	Apr-Jun		113	283	180

^{*} Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho.

^{2/} Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.

^{3/} Observed flow corrected for storage in Lake Chelan.

			al Streamf	low in Th	nousands	of Acr	
Basin, Stream	Forecast	%	Fore-				15-Yr.
and	Runoff	15-Yr.		107/	1070	1070	Average
Station	1975	Avg.	period	1974	1973	1972	58 - 72
√enatchee River System							
Venatchee River	1510	115	Apr-Sep		790	1926	1312
at Plain	1370	115	Apr-Jul		709	1686	1187
at 114111	1050	110	Apr-Jun		589	1272	956
√enatchee River	2060	115	Apr-Sep	2633	1033	2787	1786
at Peshastin	1880	116	Apr-Jul	2297	938	2464	1629
at Teshesein	1460	110	Apr-Jun	1670	786	1883	1324
itemilt Basin nr. Wenatchee	140	101	May-Sep			145*	138*
łakima River System							
lakima River	165	117	Apr-Sep	241	83	220	142
nr. Martin <u>4</u> /	150	115	Apr-Jul	223	76	198	131
	130	112	Apr-Jun	177	70	167	116
łakima River	1120	116	Apr-Sep		555	1515	965
at Cle Elum <u>5</u> /	1040	119	Apr-Jul		489	1374	877
	910	119	Apr-Jun		433	1156	764
łakima River	2020	117	Apr-Sep		582	3231	1730
nr. Parker <u>6</u> /	2000	118	Apr-Jul		590	3071	1701
	1850	117	Apr-Jun		598	2694	1580
Kachess River	150	120	Apr-Sep	200	66	195	125
nr. Easton <u>7</u> /	140	119	Apr-Jul	188	63	182	118
	125	118	Apr-Jun	151	59	* 153	106
le Elum River	570	120	Apr-Sep	728	285	747	477
nr. Roslyn <u>8</u> /	520	119	Apr-Jul	650	255	670	437
	430	116	Apr-Jun	493	220	537	372

Thousands of Miners' inches.

Observed flow corrected for storage in Lake Keechelus.

Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.

Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.

Observed flow corrected for storage in Lake Kachess.Observed flow corrected for storage in Lake Cle Elum.

			al Streamf	low in T	nousands	of Acr	e-Feet
Basin, Stream	Forecast	%	Fore-				15-Yr.
and	Runoff	15-Yr.					Average
Station	1975	Avg.	period	1974	1973	1972	58-72
Validas Dissas Contras (Contra)							
Yakima River System (Cont.) Bumping River	173	1.18	Apr-Sep	227	74	228	146
nr. Nile 9/	158	118	Apr-Jul	207	74 58	203	146 134
III. WILE 3/	129	115	Apr-Jun	156	61	155	112
	12.)	113	npr-oun	1.70	01	100	114
American River	147	115	Apr-Sep		70	186	128
nr. Nile	134	114	Apr-Jul		65	169	118
	110	110	Apr-Jun		58	137	100
Tieton River	270	110	Apr-Sep	405	160	407	247
at Tieton Dam <u>10</u> /	228	108	Apr-Jul	337	124	342	2.11
	179	104	Apr-Jun	255	99	267	172
	0.00	110					
Naches River	980	110	Apr-Sep		442	1477	889
nr. Naches 11/	875	108	Apr-Jul		385	1339	810
	740	106	Apr-Jun		336	1106	698
Ahtanum Creek	48	100	Apr-Sep		21	75	48
nr. Tampico 12/	44	100	Apr-Jul		18	69	44
	40	103	Apr-Jun		16	59	39
			•				
Lower Columbia River System							
Mill Creek	30	112	Apr-Sep		17	34	27
nr. Walla Walla	26	108	Apr-Jul		13	29	24
	23	109	Apr-Jun		11	26	21
Lewis River	1300	97	Apr-Sep	1872	800	1597	1342
at Ariel 13/	1150	98	Apr-Jul	1684	666	1392	1174
at Affer 15/	1010	96	Apr-Jun	1420	574	1236	1052
	1010	90	Apr -Jun	1420	374	1230	1032
Cowlitz River	2170	103	Apr-Sep		1252	3048	2106
Blw. Mayfield Dam	1940	105	Apr-Jul		1068	2672	1846
	1670	106	Apr-Jun		904	2201	1578
			r .				
Cowlitz River	2860	103	Apr-Sep	4296	1676	3819	2768
at Castle Rock 14/	2540	105	Apr-Jul	3850	1419	3331	2416
	2150	103	Apr-Jun	3158	1212	2782	2083
			•				

12/ Observed flow of North and South Forks (Combined)

^{9/} Observed flow corrected for storage in Bumping Lake.

^{10/} Observed flow corrected for storage in Rimrock Lake.

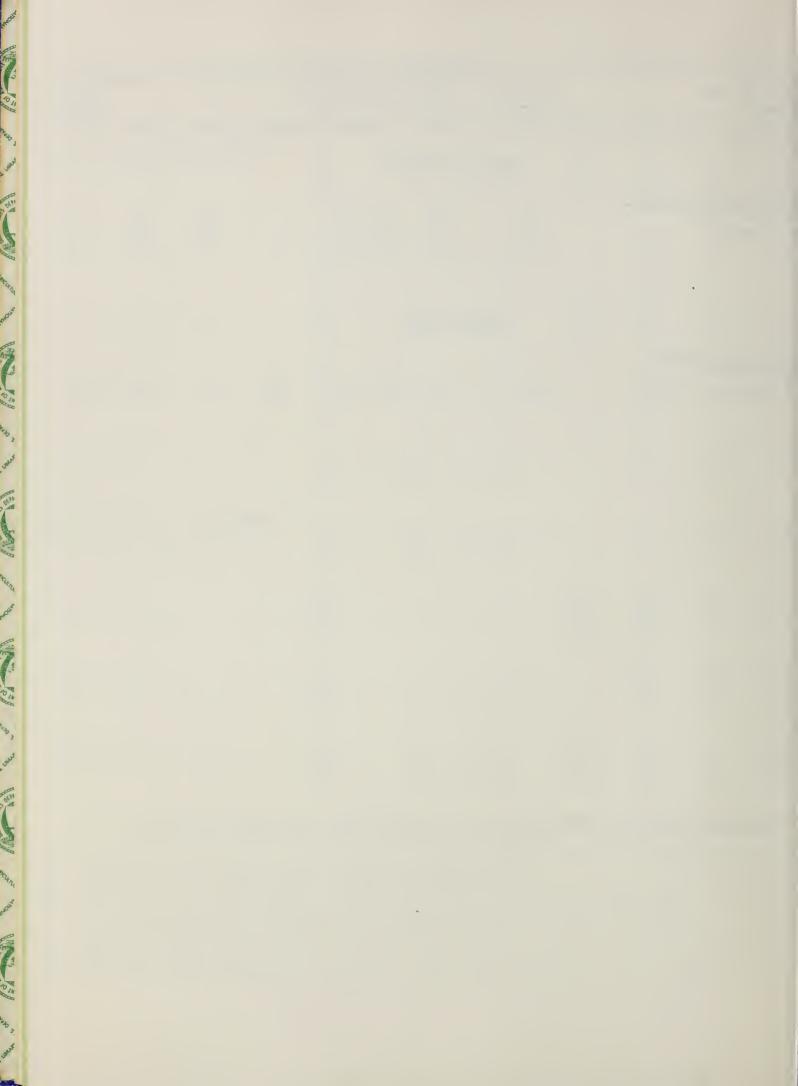
^{11/} Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.

^{13/} Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.

^{14/} Observed flow corrected for storage in Mayfield Reservoir.

		Season	al Streami.	Low in Th	nousands	of Acr	e-reet
Basin, Stream and	Forecast Runoff	% 15-Yr.	Fore- cast				15-Yr. Average
Station	1975	Avg.	period	1974	1973	1972	<u>58-72</u>
	OLYMPI	C PENINS	ULA				
Dungeness River System							
Dungeness River	176	107	Apr-Sep		120	207	165
nr. Sequim	150	109	Apr-Jul		98	171	137
	112	108	Apr-Jun		74	127	104
	(
	PUG	ET SOUND					
3kagit River System 3kagit River							
at Newhalem 15/	2770	114	Mar-Aug	3150	1610	3800	2418

^{15/} Observed flow corrected for storage in Diablo, Ross, and Gorge Reservoirs.



COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about March 1, 1975 as percent of the samd date in 1974 and 1973 and

average of record				
	No. of	1975	Snow Water E	xpressed
Tributary Basin	Courses		as percent	of
	Average	1974	1973	1958-72 Avg.
	UPPER COLI	JMBIA BASIN		
			101	
Pend Oreille	1.7	83	181	118
Kettle	15	94	179	126
Colville	4	94	204	132
Spokane	11	77	203	110
Okanogan	43	86	181	126
Methow	10	70	151	110
Chelan	8	88	152	124
Entiat	10	92	168	110
Wenatchee	9	81	245	129
Yakima	27	90	255	145
Ahtanum	2	128	284	152
	LOWER	COLUMBIA		
Mill Creek	3	63	297	134
Klickitat	1	102		161
White Salmon	1 2	74	229	104
Lewis	18	69	234	91
Cowlitz	11	80	313	113
		COUND		
	PUGEI	SOUND		
Nisqually	4	86	208	136
White	3	88	199	136
Green	8	78	322	185
Snoqualmie	8 3 3	64	302	145
Skykomish	3	69	236	117
Skagit	15	86	212	137
Nooksack	5	78	177	134
	<u>OLYMPIC</u>	PENINSULA		
Skokomish	/.	64	164	103
Elwha	4	61	153	92
	1	64	156	72
Dungeness	1	04	130	-

RESERVOIR STORAGE - 1000 ACRE FEET

BASIN OR		USABLE 1/		Measi	ured (Marc	h)
STREAM	RESERVOIR	CAPACITY	1975	1974	1973	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	58.9	127.9	53.3	162.4
Columbia	Franklin D. Roosevelt Lake	5232.0	4304.9	-1175.4	3729.1	2843.8
Columbia	Banks Lake	761.8	706.9	720.3	613.3	588.3
Okanogan	Conconully Reservoir	13.0	11.2	6.4	11.6	11.6
Okanogan	Salmon Lake	10.5	9.2	7.3	9.5	7.4
Chelan	Lake Chelan	676.1	155.1	228.5	141.4	234.9
		YAKIMA				
Yakima	Keechelus Lake	157.8	95.4	99.4	102.0	105.5
Kaches	Kachess Lake	239.0	153.6	107.9	195.0	183.6
Cle Elum	Lake Cle Elum	436.9	267.4	195.7	319.1	264.5
Bumping	Bumping Lake	33.7	2.8	4.7	9.1	10.2
Tieton	Rimrock Lake	198.0	121.6	132.1	153.3	128.2
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	782.4	1030.4	870.3	873.9
Skagit	Diablo Reservoir	90.6	86.9	86.4	89.0	85.0
Skazit	Gorge Reservoir	9.8	8.8	8.2	8.1	-

^{1/} Based on Active Storage

^{* 15-}year Average 1958-72

SOIL MOISTURE - MARCH

							
Drainage Basin			Profile	Inches	Soil M	oisture (Content
and				Total	Inches	as of M	ar. 1
Station	Number	Elev.	Depth	Capacity	1975	1974	1973
OKANOGAN							
Salmon Meadows	19A2M	4500	48	5.4	2.0	3.7	2.3
Trout Creek	3-M	3600	48	7.3	3.2	3.8	3.2
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	-	4.9	5.2
Lake Cle Elum	21B14M	2200	48	12.8	_	9.3	9.2
WALLA WALLA							
Couse	17C3m	3650	48	11.1	-	10.3	7.6
Helmers	17C2M	4400	48	12.0	-	10.1	10.6
				•			
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	8.6	11.1	8.9
opport miles is	_ 5 5 / 1.1	. 100	- 10	,	0.0		

FALL SOIL MOISTURE

Drainage Basin			Profile	Inches	Soil Mo	oisture	Content
and				Total	Inches	as of O	ct. 1
Station	Number	Elev.	Depth	Capacity	1974	1973	1972
OKANOGAN							
Salmon Meadows	19A02M	4500	48	5.4	1.8	2.6	2.8
Trout Creek	3-M	3600	48	7.3	3.0	2.8	3.3
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	_	2.6	4.1
Lake Cle Elum	21B14M	2200	48	12.8	_	6.1	8.7
WALLA WALLA							
Couse	17C3m	3650	48	11.1	-	5.6	6.0
Helmers	17C2M	4400	48	12.0	_	7.6	7.7
include 5	1,0211	7-700	,,	-		,	, • ,
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	5.4	6.0	5.7
oppor micerer	200/11	4400	70	1, 4- 0 /	۶٠٦	0.0	5.1

 $\begin{array}{c} \text{PRECIPITATION } \underline{1}/\\ \\ \text{Division Averages and Departures} \end{array}$

	FALL		WINTE	
Drainage	Sept-Oct	1974 2/	Nov. 1974 -	Feb. 1975 <u>2</u> /
Divisions	Average	Departure	Average	Departure
Columbia in Canada	122	-3.25	12.30	+1.09
Pend Oreille - Spokane	0.71	-3.77	18.74	+2.73
Northeastern Washington	0.30	-2.48	13.50	+3.94
Southeastern Washington	0.31	-2.92	12.78	- 1.56
Central Washington	1.21	-3.54	28.69	+4.49
North Central Washington	0.37	-1.25	7.17	+1.26
Northwest Slope Cascades	3.25	-9.44	52.57	+8.16
Northeastern Washington		- Lower Spoka Kettle Drain	ne, Colville, Sanpoil	and lower
Southeastern Washington			cannon and Palouse Dr	ainages.
Central Washington		- Yakima, Wena	atchee and Chelan Dra	inages.
North Central Washington		- Methow and (Okanogan Drainages.	
Northwest Slope Cascades		- Puget Sound	Drainages.	
Southwest Slope Cascades		- Lower Columb	bia Drainages.	

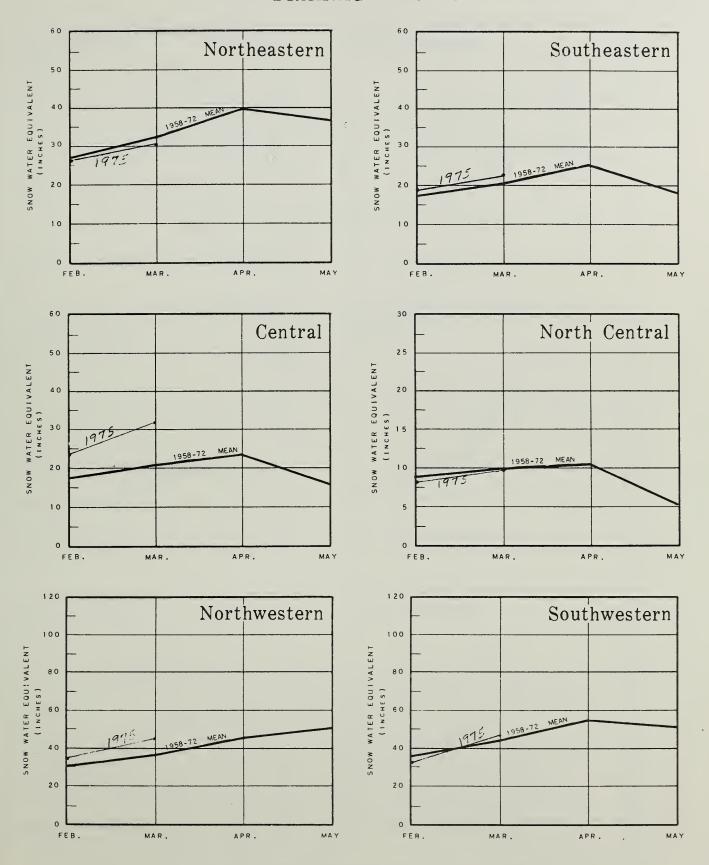
^{1/} - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service.

^{2/} - Departure from 1.5-year (1958-72) drainage division average.

WASHINGTON SNOW COVER

1975

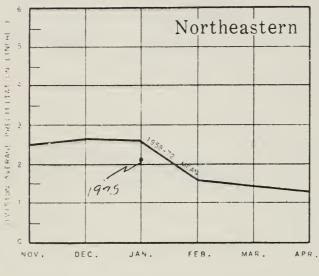
DRAINAGE AREAS

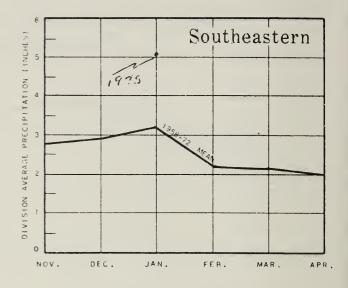


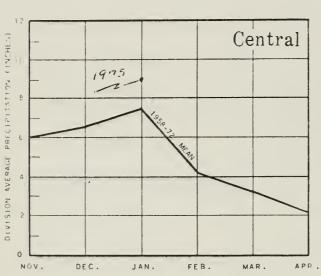
WASHINGTON VALLEY PRECIPITATION

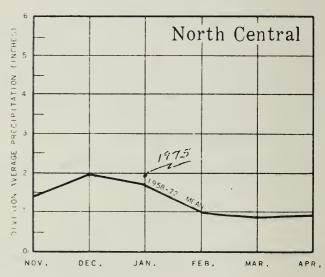
1975

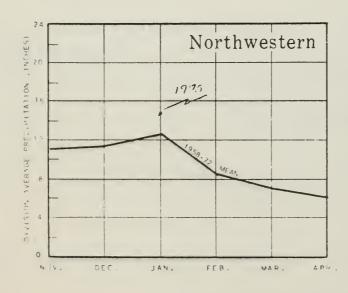
DRAINAGE AREAS

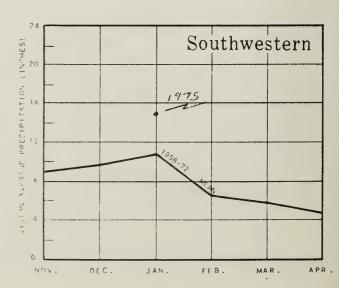


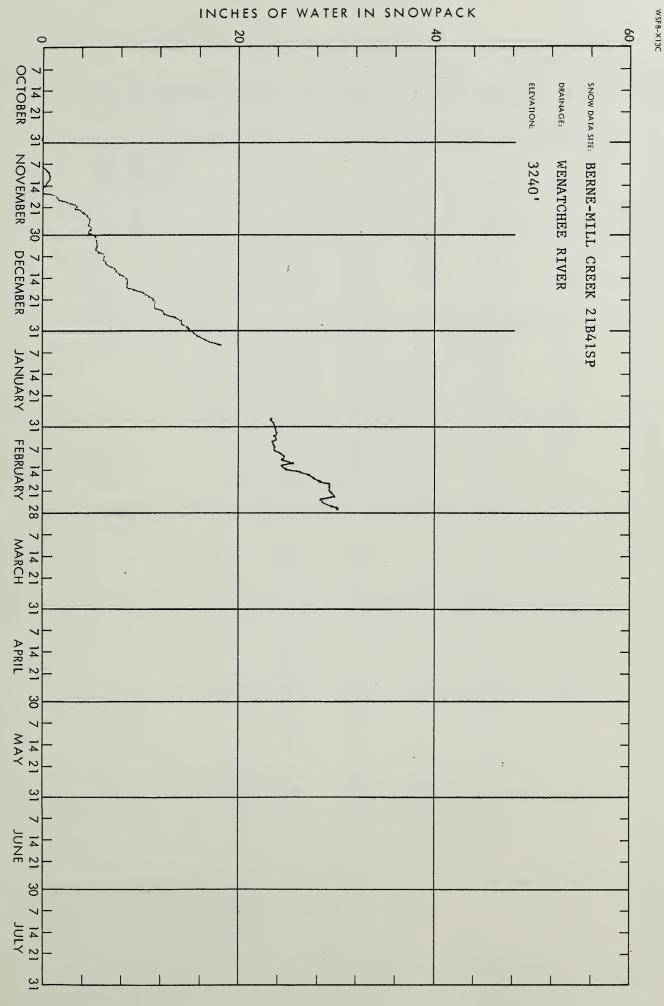


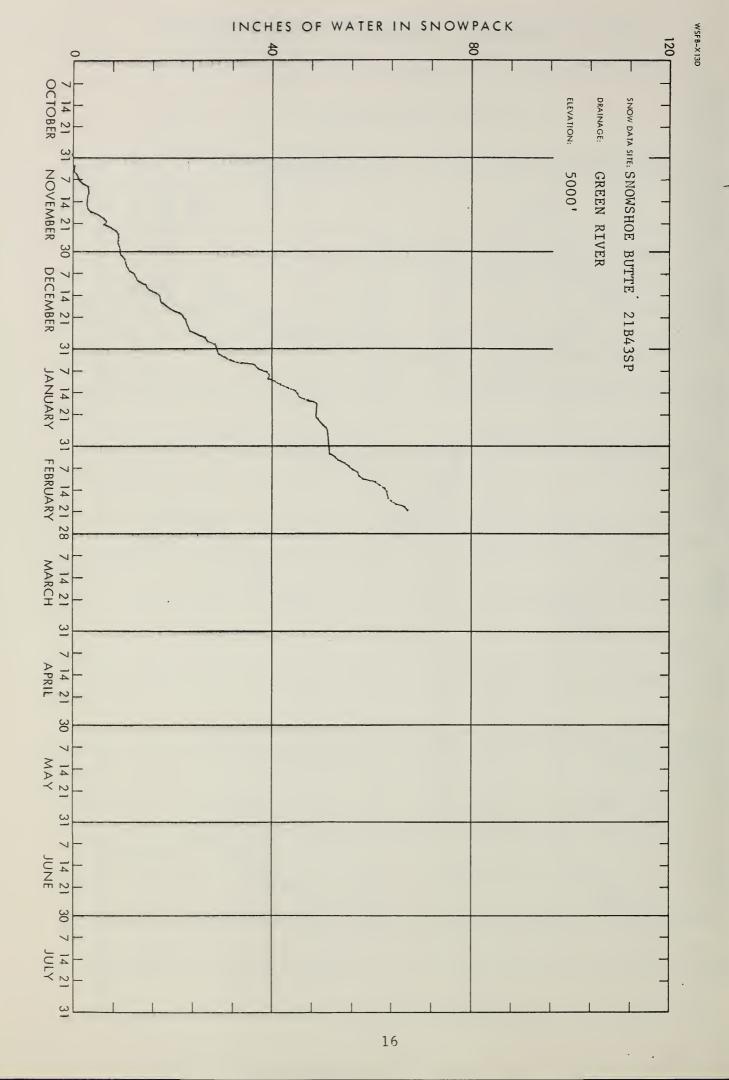












SNOW				THIS YEAR		PAST R	ECORD
DRAINAGE BASIN and/or SN	IOW COURSE		Date	Snow Depth	Water Content	Water Conte	ent (inches)
NAME	Number	Elevation	of Survey	(Inches)	(Inches)	Last Year	Average#

UPPER COLUMBIA DRAINAGE

PEND OREILLE RIVER

PEND OREILLE RIVER							
Baree Creek	15B11	5500	2/27	125	50.3	65.6	43.6
Baree Midway	15B16	4600	2/27	105	38.5	47.5	34.6
Baree Trail	15B15	3800	2/27	39	13.3	13.1	10.5
Benton Meadow	16A02	2344	2/25	31	8.6	4.0	6.1
Benton Spring	16A03	4900	2/25	68	21.4	28.9	17.4
Boyer Mountain	17A02	5250	2/25	87	28.0	39.0	23.7
Brush Creek Timber	14A13	5000	2/26	38	10.8	11.0	10.2
Chewelah	17A04	4923	3/1	58	18.2	-	16.2
Heart Lake Trail	14C10	4800	2/27	74	24.9	28.6	21.2
Hoodoo Basin	15C10	6000	2/26	126	46.9	63.4	46.1
Hoodoo Creek	15C01	5900	2/26	122	43.5	58.6	43.2
Lookout	15B02	5250	2/28	111	30.4	43.7	32.7
Mosquito Ridge	16A04A	5100	2/25	108	36.0	54.4	34.7
Nelson	19 - Can	3050	2/26	61	17.7	20.0	14.5*
Schweitzer Bowl	16A06	4500	2/28	106	45.6	49.5	27.8
Schweitzer Ridge	16A05	6100	2/28	154	60.2	61.5	39.9
Winchester Creek	17A03	2970	2/24	45	12.2	13.8	12.1
KETTLE RIVER							
Barnes Creek	90 - Can	5300	2/27	62	20.0	22.0	18.0*
Big White Mtn.	154-Can	5500	2/25	69	20.1	26.6	16.9*
Boulder Road	18A02	1450	2/27	24	7.0	2.2	4.9
Butte Creek	18A03	4070	2/27	39	10.9	10.2	9.3
Cabin Creek	18A08	3170	2/27	34	5.2	9.8	8.2
Carmi	126 - Can	4100	2/23	37	10.8	8.0	6.1*
Farron # 1	17 - Can	4000	2/26	53	14.1	17.8	12.4*
Farron # 2	243-Can	4000	2/26	51	13.8	17.7	New
Goat Creek	18A04	3595	2/27	31	8.9	8.7	7.1
Graystoke Lake	5 - Can	5950	2/27	55	17.2	23.8	18.7*
Monashee Pass	48A-Can	4500	2/27	49	14.6	14.2	12.7*
Old Glory Mtn.	42 - Can	7000	3/1	92	37.4	38.0	24.6*
Snow Caps Creek	18A05	2150	2/27	23	6.0	6.1	5.1
Snow Caps Trail	18A06	2720	2/27	26	6.6	7.2	6.7
Summit G. S.	18A07	4600	2/27	35	9.6	10.1	7.4
Trapping Creek Lower	166 - Can	3050	2/23	34	8.8	7.0	5.1*
Trapping Creek Upper	165 - Can	4450	2/23	47	13.2	13.4	8.9*

[#] Average based on 1958-72 average

^{*} Average for years of record

SNOW				THIS YEAR	Y	PAST R	ECORD
DRAINAGE BASIN and/or St	NOW COURSE		Date	Snow Depth	Water Content	Water Conte	ent (inches)
NAME	Number	Elevation	of Survey	(Inches)	(Inches)	Last Year	Average #
COLVILLE RIVER							
Baird	17A06	3215	2/26	39	10.2	9.5	7.1
Carlson	18A09	2885	3/1	29	9.6	2.4	4.6
Chewelah	17A04	4925	3/1	58	18.2	-	16.2
Stranger Mountain	17A05	4990	3/1	47	14.8	21.8	13.1
SPOKANE RIVER							
Above Burke	15B08	4100	2/28	83	25.9	27.0	-
Copper Ridge	16B02	4800	2/27	87	28.7	45.1	25.7
Forty-nine Meadows	15B03	5000	2/26	95	25.8	-	-
Fourth of July Summit	16B03	3100	2/28	45	14.4	13.5	7.3
Granite Peak	15B1 3 A	6000	2/26	124	34.4	-	37.7
Kellogg Peak	16B05A	5560	2/25	87	29.8	41.4	-
Lookout	15B02	5250	2/28	111	30.4	43.7	32.7
Lost Lake	15B14A	6000	2/25	145	45.6	-	51.3
Lower Sands Creek	16B01	3400	2/27	61	18.5	26.8	17.5
Medicine Ridge	15B04A	6150	2/26	125	35.8	-	38.5
Mosquito Ridge	16A04A	5110	2/25	108	36.0	54.4	34.7
Roland Summit	15B05A	5200	2/25	92	31.0	54.1	31.3
Sherwin	16C01	3200	2/28	59	19.2	20.0	13.8
Sunset	15B09A	5600	2/25	118	30.7	-	33.7
OKANOGAN RIVER							
Aberdeen Lake	6A-Can	4300	3/2	35	9.1	7.3	5.9%
Blackwall Mountain	100 - Can	6250	2/20	97	31.3	42.6	32.4%
Bouleau Creek	31 - Can	5000	3/3	52	17.2	13.5	10.5*
Bouleau Lake	234-Can	4580	3/1	Not Me	easured	16.0	13.3*
Brenda Mine	193 - Can	4800	2/26	54	17.7	15.6	12.8*
Brookmere	27 - Can	3200	2/26	45	8.2	11.9	9.0%
Carrs Landing Upper	168 - Can	3200	2/26	30	7.1	4.6	4.5*
Clark +	19A08a	7000	2/27	64	21.8	26.5	19.7
Enderby	130-Can	6250	2/26	105	27.8	42.7	32.4*
Esperon Creek Lower	164 - Can	4400	2/23	54	15.9	15.0	10.9*
Esperon Creek Middle	163 - Can	4700	2/23	60	18.7	20.2	13.5*
Esperon Creek Upper	162 - Can	5400	2/23	71	22.8	25.0	16.5*
Freezeout Meadows New	20A38	5000	2/25	108	37.8	73.3	25.7
Graystoke Lake	5 - Can		2/27	55	17.2	23.8	18.7*
Hamilton Hill	107 - Can		2/27	59	17.6	19.2	14.2*
Harts Pass	20A05A		2/24	130	46.1	64.4	38.8
Horseshoe Basin +	19A05a	7000	2/26	46	15.2	21.4	11.6
Isintok Lake	152 - Can		3/1	38	10.7	12.3	7.5*
Lost Horse Mountain	105 - Can	6300	2/28	39	10.4	12.7	8.5*

[#] Average based on 1958-72 average

^{*} Average for years of record

⁺ Snow water equivalent estimated from aerial stadia observation

SNOW				THIS YEAR		PAST RECORD		
DRAINAGE BASIN and/or S	SNOW COURSE		Date	Snow Depth	Water Content	Water Conte		
NAME	Number	Elevation	of Survey	(Inches)	(inches)	Last Year	Average #	
OKANOGAN RIVER (Co	ont.)							
Loup Loup	19A07	4650	2/27	33	10.1	15.4	9.5	
McCulloch	4 - Can	4200	3/1	36	9.8	8.4	6.2*	
Missezula Mountain	106 - Can	5100	2/26	46	13.1	13.9	8.8*	
Mission Creek	5A-Can	6000	2/27	66	21.7	25.6	17.3*	
Monashee Pass	48A-Can	4500	2/27	49	14.6	13.2	12.7*	
Mount Kobau	156 - Can	5950	2/27	39	11.2	19.2	11.8*	
Muckamuck +	19A09a	6390	2/26	46	15.6	24.8	15.1	
Mutton Creek No. 1	19A01	5700	2/27	43	13.8	22.4	12.9	
Mutton Creek No. 2	19A04	6000	2/27	37	12.7	21.4	13.3	
Mutton Creek No. 2 SP	19A1 1 SP	6000	2/27	-	9.5	17.4	New	
New Copper Mountain	46A-Can	4300	2/25	29	6.5	8.4	5.8*	
New Penticton Res. #2	183 - Can	5225	2/28	40	12.9	10.9	7.6*	
Nickel Plate Mtn.	47 - Can	6200	2/27	36	9.1	12.0	7.1*	
Oyama Lake	2 03-Can	4400	2/27	37	9.5	8.6	6.3*	
Paysayten +	20A28a	4300	2/26	63	20.8	22.4	15.4*	
Postill Lake	55 - Can	4500	2/28	37	10.7	10.6	7.4%	
Quartette Lake	34-Can	4000	2/25	41	10.1	15.9	-	
Rusty Creek	19A03	4000	2/28	30	8.0	11.8	7.1	
Salmon Meadows	19A02	4500	2/27	35	9.7	14.8	9.9	
Silver Star Mountain	99 - Can	6050	3/1	86	31.8	35.9	23.8*	
Starvation Mtn. +	19A10a	6750	2/26	52	17.7	.26.5	18.3	
Summerland Reservoir	3A-Can	4200	3/2	46	14.5	12.2	8.7*	
Touts Coulee	19A06	2845	2/26	17	3.0	5.7	4.0	
Trout Creek	3 - Can	4700	2/26	43	11.2	9.9	6.4*	
Vaseux Creek	233 - Can	4600	3/2	30	6.9	11.2	7.2*	
White Rocks Mountain	70 - Can	6000	2/27	80	31.0	30.9	18.9*	
METHOW RIVER								
Billy Goat Pass +	20A10a	6409	2/26	90	29.7	36.7	25.8	
Dollar Watch +	20A29a	7000	2/26	84	27.7	34.7	25.8	
Harts Pass	20A05A	6500	2/24	130	46.1	64.4	38.8	
Horseshoe Basin +	19A05a	7000	2/26	46	15.2	21.4	11.6	
Loup Loup	19A07	4650	2/27	33	10.1	15.4	9.5	
Mutton Creek No. 1	19A01	5700	2/27	43	13.8	22.4	12.9	
Mutton Creek No. 2	19A04	6000	2/27	37	12.7	21.4	13.3	
Mutton Creek No. 2 SP	19A11SP	6000	2/27	-	9.5	17.4	New	
Rusty Creek	19A03	4000	2/28	30	8.0	11.8	7.1	
Salmon Meadows	19A02	4500	2/27	35	9.7	14.8	9.9	
War Creek Pass +	20A31a	6500	2/26	132	43.6	55.1	40.5	

[#] Average based on 1958-72 average

USDA SCS PORTLAND GOEGON 1973

^{*} Average for years of record

⁺ Snow water equivalent estimated from aerial stadia observation

SNOW				THIS YEAR	Y	PAST R	ECORD
DRAINAGE BASIN and/or \$	NOW COURSE		Date	Snow Depth	Water Content	Water Cont	ent (inches)
NAME	Number	Elevation	of Survey	(Inches)	(Inches)	Last Year	Average #
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	2/26	128	44.8	-	37.4
Greenwood Flat +	20A25a	3540	2/26	81	28.4	36.0	22.9
Little Meadows +	20A24a	5275	2/26	127	44.4	56.2	39.9
Lyman Lake	20A23A	5900	3/1	Not Me	asured	-	52.5
Park Creek Flat +	20A13a	2220	3/1	Not Me	asured	43.6	31.4
Park Creek Ridge	20A12A	4600	2/26	160	56.0	65.5	41.9
Petersons +	20A16a	3730	2/26	138	48.3	40.3	32.9
Rainy Pass	20A09	4780	2/24	123	42.6	51.4	36.0
Safety Harbor	20A30A	6300	2/26	105	33.6	-	25.7
Var Creek Pass +	20A31a	6500	2/26	132	43.6	55.1	40.5
ENTIAT RIVER							
Blue Creek G. S. +	20B28a	5425	3/3	120	44.4	44.7	New
Brief	20B19	1600	2/23	32	8.4	6.6	7.5
Entiat Meadows +	20A33a	4800	3/3	138	51.1	56.4	45.7
Entiat River Trail +	20A34a	3150	3/3	82	27.1	28.5	21.8
Four Mile Ridge +	20B27a	7000	3/3	92	34.0	40.2	-
Fox Camp +	20A36a	6510	3/3	146	54.0	59.0	54.6
Pope Ridge	20B20	4300	2/24	71	23.0	25.9	16.5
Pugh Ridge +	20A32a	6400	3/3	97	35.9	40.5	34.5
Shady Pass	20A37	6200	2/26	88	33.0	-	-
Snow Brushy +	20A35a	3850	3/3	105	34.7	45.7	37.7
Commy Creek +	20B21a	5300	3/3	76	28.1	35.0	28.3
WENATCHEE RIVER							
Berne-Mill Creek	21B23	3170	2/14	94	33.2	36.3	23.9
			2/27		35.5	43.0	24.7
Berne-Mill Creek New SP	21B41SP	3240	2/27	79	30.4	38.0	21.0
Blewett Pass No. 2	20B02	4270	2/26	53	19.3	22.5	14.9
Chiwaukum G. S.	20B16	1810	2/14	42	11.6	15.2	11.2
,			2/27	41	11.0	17.0	
Fish Lake	21B04	3371		108	38.4	45.2	31.3
Lake Wenatchee	20B05	1970		55		17.6	
				53		19.7	
Leavenworth R. S.	20B17	1127	2/14	21	7.0	2.3	5.7
			2/26		7.1	2.5	4.2
Lyman Lake	20A23A	5900	3/1		asured	-	52.5
Merritt	20B18	2140	2/14		20.8	21.6	15.5
				65	21.3	22.9	15.2
Stevens Pass	21B01	4070	2/14	149	54.6	63.7	42.5
			2/27	147	60.4	73.5	45.7
Stevens Pass Sand Shed	21B45	3700	2/14	111	37.5	52.3	-
			2/27	104	39.8	57.0	-

[#] Average based on 1958-72 average+ Snow water equivalent estimated from aerial stadia observation

SNOW			THIS YEAR		PAST RECORD		
DRAINAGE BASIN and/or SN	IOW COURSE		D	Snow Depth	Water Content	Water Conte	
NAME	Number	Elevation	Date of Survey	(Inches)	(Inches)	Last Year	Average Tr
SQUILCHUCK CREEK							
SQUILLOHOCK CKEEK							
Beehive Springs	20B03	4400	2/27	28	11.6	14.5	7.9
Scout-A-Vista	20B04	3400	2/27	35	11.7	13.3	8.1
STEMILT CREEK							
Jump-Off	20B08	4450	2/27	33	11.2	13.6	8.3
Stemilt Slide	20B06	5000	2/27	47	16.4	21.9	15.1
Upper Wheeler	20B07	4400	2/27	37	13.9	13.0	10.1
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	2/28	42	15.8	21.3	_
Colockum Creek Lower	20B22	4300	2/28	34	12.5	11.5	_
YAKIMA RIVER							
			0.40=				
Ahtanum R. S.	21011	3100	2/25	36	12.8	7.6	6.7
Big Boulder Creek	21B09	3200	2/26	75 52	25.3	31.6	18.5
Blewett Pass No. 2	20B02	4270	2/26	53	19.3	22.5	14.9
Bumping Lake	21008	3450	2/13	59 53	18.0	21.1	15.2
Promoto a Laka Mary	21026	3400	2/28	57	17.9	26.0	15.3
Bumping Lake New	21C36	3400	2/13 2/28	74 73	22.1 25.1	26.4 31.9	19.6 20.0
Cayuse Pass	21C06	5300	2/24	212	83.1	99.5	70.4
Colockum Pass	20B09	5370	2/24	54	17.1	21.6	14.5
Cooke Creek	20B10	4123	2/24	34	10.3	11.0	6.1
Corral Pass	21B13	6000	2/21	163	48.0	52.0	34.3
Fish Lake	21B04	3371	2/26	108	38.4	45.2	31.3
Green Lake	21C10	6000	2/25	108	33.0	37.3	29.1
Grouse Camp	20B11	5385	2/27	52	17.6	24.3	15.3
High Creek	20B12	2930	2/28	27	7.4	9.1	5.2
Joe Lake	21B46a	4624	2/24	189	58.6	81.0	-
Lake Cle Elum	21B14M	2200	2/13	38	13.1	9.8	8.2
			2/27	40	13.2	11.9	8.1
Lemah Creek +	21B47a	3327	2/24	129	42.6	55.1	-
Manashtash	20C01	3935	2/28	28	8.0	6.6	4.3
Morse Lake	21C17	5400	2/27	157	71.0	-	47.7
Nanum	20B13	2340	2/27	38	11.5	14.4	9.6
Olallie Meadows	21B02	3625	2/21	196	52.6	81.8	40.6
Satus Pass	20D01		2/28	39	14.0	13.7	8.7
Stampede Pass SP	21B10	3860	2/14	-	55.4	60.0	34.2
			3/1	-	61.2	-	36.2

[#] Average based on 1958-72 average

USDA SCS PORTLAND OREGON 1973

⁺ Snow water equivalent estimated from aerial stadia observation

SNOW				THIS YEAR		PAST RECORD		
DRAINAGE BASIN and/or	SNOW COURSE		Date	Snow Depth	Water Content	Water Cont	ent (inches)	
NAME	Number	Elevation	of Survey	(Inches)	(inches)	Last Year	Average#	
YAKIMA RIVER (Con	t.)							
Trail Creek	20B14	3360	2/24	18	5.8	5.0	2.2	
Tunnel Avenue	21B08	2450	2/14	86	28.8	28.8	20.1	
			2/28	89	32.2	32.6	21.2	
Van Epps Pass +	20B26a	5925	2/24	137	48.0	62.3	-	
Valters Flat	20B15	3360	2/27	32	9.9	11.0	6.9	
Vaptus Lake +	21B49a	3024	2/24	132	43.6	51.8	•	
White Pass (E. Side)	21C28	4500	2/14	78	24.9	27.7	20.8	
· ·			2/27	77	27.3	35.9	22.0	
Thite Pass (L. Lake)	21C27	4500	2/25	85	32.9	35.9	26.1	
AHTANUM CREEK								
Ahtanum R. S.	21C11	3100	2/25	36	12.8	7.6	6.7	
Green Lake	21011	6000	2/25	108	33.0	37.3	29.1	
reen bake	21010	0000	2/25	100	33. 0	37.3	29.1	
LOWI	ER COL	UMB	I A D R	AINA	GE			
ASOTIN CREEK								
Spruce Springs	17C04	5700	2/24	79	26.6	34.6	23.6	
MILL CREEK								
Homestead	17C01	4030	2/26	30	11.6	17.2	7.4	
Martin Springs	17C02	4400	2/26	48	16.2	23.5	11.9	
Tollgate	18D3M	5070	2/25	74	22.9	42.4	21.1	
KLICKITAT RIVER								
Satus Pass	20D01	4030	2/28	39	14.0	13.7	8.7	
WHITE SALMON RIVER	3							
Cultus Creek	21012	4000	2/24	108	41.1	57.4	40.5	
Surprise Lakes		4250		119	47.8	64.0	44.2	
WIND RIVER								
Old Man Pass	21D19	3100	2/24	39	13.9	23.4	17.2	
ord fidir 1003	21019	2100	2/24	39	13.7	23.4	1/.2	

[#] Average based on 1958-72 average

⁺ Snow water equivalent estimated from aerial stadia observation

SNOW DATA TO MARCH 1, 1975 - APPENDIX 7

NOW				THIS YEAR		PAST RECORD		
DRAINAGE BASIN and/or St	NOW COURSE		Date	Snow Depth	Water Content	Water Conte	ent (inches)	
NAME	Number	Elevation	of Survey	(Inches)	(Inches)	Last Year	Average #	
LEWIS RIVER								
Blue Lake +	21C22a	4800	2/24	194	75.7	96.5	69.7	
Bob's Trail	21C21	2200	2/24	34	11.8	20.3	14.2	
Calamity Ridge +	22D01a	2500	2/24	8	3.2	4.2	6.7	
Council Pass +	21C18a	4200	2/24	108	42.1	56.6	37.1	
Cultus Creek	21C12	4000	2/24	108	41.1	57.4	40.5	
Divide Meadow +	21C29a	5600	2/24	144	54.7	63.8	50.9	
Grand Meadow	21C25	3500	2/24	71	26.8	35.2	23.8	
Lone Pine Shelter	21C26	3800	2/25	91	34.6	59.6	35.0	
Marble Mountain +	22C05a	3200	2/24	48	21.1	54.2	31.4	
Mosquito Meadows	21C19	4100	2/25	95	36.0	52.8	36.5	
New Muddy River	22C06	2000	2/24	17	7.1	5.9	10.6	
Old Man Pass	21D19	3100	2/24	39	13.9	23.4	17.2	
Plains of Abraham +	22C01a	4400	2/24	132	52.8	80.7	58.5	
Smith Creek Road	22C04	2100	2/24	40	14.3	19.8	17.2	
Spencer Meadow +	21C20a	3400	2/24	48	17.8	37.4	21.5	
Surprise Lakes	21C13A	4250	2/24	119	47.8	64.0	44.2	
Table Mountain +	21C24a	4200	2/24	130	50.7	63.8	41.7	
Timbered Peak +	21D1Sa	3000	2/24	28	10.6	25.9	16.0	
COWLITZ RIVER								
Cayuse Pass	21C06	5300	2/24	212	83.1	99.5	70.4	
Mosquito Meadows	21C19	4100	2/25	95	36.0	52.8	36.6	
Ohanapecosh	21C32	2200	2/24	50	18.8	18.9	15.8	
Packwood Lake	21C31	2870	2/24	39	14.9	19.2	12.7	
Pigtail Peak	21C33	5900	2/25	157	60.7	69.8	57.2	
Plains of Abraham +	22C01a	4400	2/24	132	52.8	80.7	58.5	
Potato Hill	21C14	4500	2/25	85	32.4	43.1	28.8	
White Pass (E. Side)	21C28	4500	2/14	78	24.9	27.7	20.8	
(2, 222)		,5,5	2/27		27.3			
White Pass (L. Lake)	21C27	4500			32.9	35.9		
Willame Creek	21C30		2/24	79	28.7		26.9	
		•						
<u>P U</u>	GET S	OUND	DRA	I N A G	E			
NISQUALLY RIVER								
Ghost Forest	21CO4	4550	2/24	121	49.8	58.5	39.0	
Longmire	21C03		2/24	38	15.5	19.7	9.0	
New Paradise Park	21C35			187	80.0	87.2	61.8	
Stem Glade	21C01		2/24	182	72.0	80.7	60.5	

[#] Average based on 1958-72 average

USDA SCS #Q#FLAND OREGON 1973

⁺ Snow water equivalent estimated from aerial stadia observation

SNOW				THIS YEAR		PAST RECORD		
DRAINAGE BASIN and/or SM	OW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Cont	ent (inches)	
NAME	Number	Elevation	Of Survey	(mches)	(inches)	Last Year	Average #	
WHITE RIVER								
Cayuse Pass	21006	5300	2/24	212	83.1	99.5	70.4	
Corral Pass Morse Lake	21B13 21C17	6000 5400	2/21 2/27	145 157	48.5 71.0	52.0 -	34.3 47.7	
GREEN RIVER								
Airstrip	21B24	1800	2/25	34	14.0	2.0	4.4	
Charley Creek	21B25	1200	2/25	10	3.2	0.0	1.2	
Cougar Mountain SP	21B42SP	3200	2/24	67	28.2	31.0	-	
Grass Mtn. No. 2	21B27	2900	2/25	52	20.2	34.7	19.4	
Grass Mtn. No. 3	21B28	2100	2/25	33	12.3	5.8	5.7	
Lester Creek Lynn Lake	21B29 21B50	3100 4000	2/25 2/25	85 63	30.2 26.7	35.8	21.3	
Sawmill Ridge	21B30	4700	2/25	111	41.8	52.4	34.1	
Snowshoe Butte SP	21B31 21B43SP	5000	2/21	177	67.8	88.8	>4.I	
Stampede Pass SP	21B10	3860	2/14	±// ⇔	55.4	60.0	34.2	
			3/1	_	61.2	-	36.2	
Twin Camp	21B30	4100	2/25	88	30.8	38.0	21.6	
CEDAR RIVER								
City Cabin	21B03	2390	2/25	62	24.1	29.0	13.5	
Mt. Gardner	21B21	3300	2/25	57	23.1	31.8	15.6	
Mt. Lindsay	21B16	2500	2/28	46	17.7	22.6	12.8	
Mt. Washington New	21B52	3000	2/28	32 56	14.9	16.4	0 0	
Rex River S. F. Cedar	21B17 21B06	2400 3000	2/28 2/25	78	22.8 32.6	28.6	8.9 17.3	
Tinkham Creek	21B00 21B20	3400	2/25	83	34.3	41.8	20.0	
SNOQUALMIE RIVER								
Alpine Meadow	21B48	3500	2/27	101	42.9	60.5	-	
Lake Elizabeth	21B19	2900	2/26	95	36.6	65.7	36.4	
Olallie Meadows	21B02	3625	2/21	142	52.6	81.8	40.6	
S. F. Tolt	21B18	1900	2/27	14	5.5	2.4	2.7	
SKYKOMISH RIVER								
Lake Elizabeth	21B19	2900	2/26	95	36.6	65.7	36.4	
Stevens Pass	21B01	4070	2/14	149	54.6	63.7	42.5	
			2/27	147	60.4	73.5	45.7	
Stevens Pass Sand Shed	21B45	3700	2/14	111	37.5	52.3	-	
			2/27	104	39.8	57.0	-	

[#] Average based on 1958-72 average

SNOW				THIS YEAR		PAST R	ECORD
DRAINAGE BASIN and/or SN	NOW COURSE		Date	Snow Depth	Water Content	Water Conte	ent (inches)
NAME	Number	Elevation	of Survey	(Inches)	(Inches)	Last Year	Average #
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	2/25	57	20.4	22.0	13.0
Beaver Pass	21A01	3680	2/25	87	30.2	45.5	28.3
Brown Top	21A28a	6000	2/25	162	59.0	90.6	-
Cloudy Pass	20A22a	6500	2/26	128	44.8	-	37.4
Devils Park	20A04	5900	2/24	129	47.9	61.5	39.4
Freezeout Cr. Trail	20A01	3500	2/25	49	13.7	21.7	11.8
Freezeout Meadows New	20A38	5000	2/25	108	37.8	73.3	25.7
Granite Creek	21A29	3500	2/24	67	21.0	24.8	-
Harts Pass	20A05A	6500	2/24	130	46.1	64.4	38.8
Klesilkwa	35B-Can	3700	3/1	Not Me	asured	20.7	13.0*
Lyman Lake +	20A23A	5900	3/1	Not Me	asured	-	52.5
Meadow Cabins	20A08	1900	2/24	33	10.6	6.0	6.8
New Hozomeen Lake	21A30	2800	2/25	50	15.7	20.2	-
New Tashme	26A-Can	2500	3/1	46	17.8	15.8	11.2*
Quartette Lake	34 - Can	4000	2/25	41	10.1	17.3	-
Rainy Pass	20A09	4780	2/24	123	42.6	51.4	36.0
Thunder Basin	20A07	4200	2/24	102	36.2	30.7	19.8
BAKER RIVER							
Baker Pass +	21A27a	4900	2/27	190	76.0	109.0	_
Dock Butte +	21A11A	3800	2/24	169	68.0	94.0	61.3
Easy Pass +	21A07A	5200	2/24	170	68.0	100.0	72.0
Jasper Pass +	21A06A	5400	2/24	216	86.0	111.0	82.8
Marten Lake +	21A09A	3600	2/24	193	77.0	100.0	67.6
Mount Blum +	21A18a	5800	2/27	156	62.0	75.0	58.2
Panorama New	21A26	4300	2/13	166	61.0	101.3	-
			2/27	157	68.5	109.9	-
Rocky Creek +	21A12A	2100	2/24	80	32.0	49.0	25.4
Schreibers Meadow +	21A10A	3400	2/24	130	52.0	82.0	53.8
S. F. Thunder Creek +	21A14A		2/24	36	14.0	18.0	8.1
Watson Lakes +	21A08A		2/24	160	64.0	98.0	57.6
NOOKSACK RIVER							
Bald Mountain +	21A19a	4400	2/25	153	61.2	69.5	42.9
Canyon +	21A20a	5100	2/25	167	66.8	84.0	48.3
Glacier Creek	21A23	3700	2/25	67	25.5	36.8	21.6
Panorama New	21A26	4300	2/13	166	61.0	101.3	
			2/27	157	68.5	109.9	-

[#] Average based on 1958-72 average

USDA SES PORTLAND OREGON 1913

^{*} Average for years of record

⁺ Snow water equivalent estimated from aerial stadia observation

SNOW				THIS YEAR	7	PAST R	ECORD
DRAINAGE BASIN and/o	SNOW COURSE		Date	Snow Depth	Water Content (Inches)	Water Conti	ent (inches)
NAME	Number	Elevation	of Survey	(Inches)		Last Year	Average #
	OLYMP	I C I	PENIN	SULA	<u> </u>		
MORSE CREEK							
Cox Valley	23B14	4500	2/24	99	35.0	54.4	-
ELWHA RIVER							
Hurricane	23B03	4500	2/24	65	1.8.5	30.2	20.0
SKOKOMISH RIVER							
Black & White Black & White Lakes Four Streams Home Sweet Home	23B07 23B06 23B10 23B05	4200 4700 3000 5200	2/25 2/25 2/25 2/25	100 125 73 160	35.5 54.0 27.8 63.7	55.2 78.0 53.4 88.0	33.5 51.2 27.0 64.5

[#] Average based on 1958-72 average

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources, Water Resources Service, British Columbia

States:

Washington State Department of Ecology Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

ROOM 360, U.S. COURT HOUSE SPOKANE, WASHINGTON 99201

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300



FIRST CLASS MAIL

COOPERATIVE SNOW SURVEYS FEDERAL - STATE - PRIVATE

domestic and municipal water water supply for irrigation, supply, hydro-electric power necessary for forecasting generation, navigation, Furnishes the basic data mining and industry "The Conservation of Water begins with the Snow Survey"